ABSTRACT

Weighted random scheduling is preformed, which may be particularly applicable to packet switching systems. For each particular input of multiple switch inputs, a request to send a packet to one of the outputs of the switch is generated by weighted randomly selecting one of the outputs to which the particular input has one or more packets to send. One of the requests is granted for each different one of the outputs for which one or more requests were generated. Packets are sent between the inputs and the output corresponding to the granted requests. The weighted random selection is typically weighted based on the number of packets or bytes to send to each of the outputs by a corresponding input of the inputs, the last times packets were sent from a corresponding input of the inputs to each of the outputs, and/ classes of service associated with packets to send to each of the outputs by a corresponding input of the inputs.